

REMARKS

Claim 9 has been amended to make it clear that the "formalification" treatment refers to treatment with formaldehyde (formalin). In light of this clarification, it is respectfully submitted that the rejection of claim 9 under 35 U.S.C. 112, second paragraph, can be withdrawn.

Several additional claims based on the original claims have been presented for consideration by the Examiner.

The claims were rejected under 35 U.S.C. 103 over Zemans in view of Rowell. This rejection is respectfully traversed.

The bleaching of a wooden material is known. However, after conventional bleaching treatments, defects in which the color of the wooden material is deepened by exposure to light or heat tend to occur. When the degree of change of color of a wooden material is indicated by the degree of color difference, bleach wooden materials have a larger degree of color difference than wooden materials which have not been bleached.

It is also known to subject a wooden material to an acetylating treatment to improve resistance to humidity and dimensional stability. However, the resulting acetylated wooden product has a problem that in the color is changed to a lighter color upon exposure to light and gradually decolorized to white. Thus, both the conventional bleaching treatment and acetylating treatment of a wooden material are both characterized by problems with respect to changes in color.

In the present invention, a wooden material is subjected to both a bleaching treatment and a acetylating treatment or a bleaching treatment and a substituting treatment in which a phenol hydroxyl group in the wooden material becomes substituted by another group. This combination of treatments significantly suppresses the change of color in the wooden material caused by exposure to light or heat. As shown in Table 1 on page 11 of the application, subjecting a wooden material to bleaching alone results in a

change in color of 15 units and subjecting the wooden material to acetylation alone results in a change of 10 units. By combining the treatments, the change in color is reduced to only 7 units and in the preferred embodiment in which bleaching is carried out before the acetylation, the change in color is reduced to 4 units. Nothing in the prior art teaches or suggest that these results could be achieved.

The two references cited by the Examiner are representative of the prior art. Zemans teaches a bleaching procedure but does not teach acetylation. Rowell teaches acetylation but does not teach bleaching. There must be some suggestion or motivation to combine the two references but none is present in the instant case.

In an attempt to provide the suggestion, the Office Action avers that Zemans contemplates additional processing of the bleached product to improve the quality of the product. This is apparently based on the assertion that Zeman contemplates additional processing to improve the quality of the bleached workpiece at col. 2, lines 23-25. It is respectfully submitted that this assertion is an overstatement of the disclosure of the reference. The passage is limited to washing and drying steps and it is respectfully submitted that it is apparent from the reference as a whole that such washing and drying steps refer to procedures are carried out between the three essential processing steps of Zemans or, perhaps, at the end of the third step. There is no teaching or suggestion in this reference of any processing beyond washing and drying.

Beyond the foregoing considerations, it is respectfully submitted that the improvement in color properties achieved by the present invention is surprising and unexpected in view of the teachings of the art and demonstrates that the claimed invention is unobvious.

In light of all of the foregoing considerations, it is respectfully submitted that this application is now in condition to be allowed and the early issuance of a Notice of Allowance is respectfully solicited.

Dated: September 12, 2003

Respectfully submitted,

By Edward A. Meilman
Edward A. Meilman

Registration No.: 24,735
DICKSTEIN SHAPIRO MORIN &
OSHINSKY LLP
1177 Avenue of the Americas
41st Floor
New York, New York 10036-2714
(212) 835-1400
Attorneys for Applicant